

BONSUCRO®

Monitoring and Evaluation System Report

V1.1

15 January 2014

Bonsucro Secretariat



Bonsucro's mission is "to foster the sustainability of the sugarcane sector through a metric-based certification scheme and by supporting continuous improvement for members".

Bonsucro is a registered trademark in the European Union and in Australia and a trademark in other countries.

Bonsucro is the trading name of the Better Sugar Cane Initiative Ltd, a company registered in England and Wales, company number 06798568.

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Differences between Version 1 and this Version 1.1

This is a revised version of Bonsucro's Monitoring and Evaluation System Report, published on 15 January 2014.

This version introduces a clarification (see table on page 8) regarding the types of evaluation associated with the Monitoring & Evaluation Programme and their respective characteristics.

This version also provides corrections to section 2 (Institutional Structure of Monitoring & Evaluation Programme) specifically regarding the budget for Monitoring and Evaluation (M&E) activities and percentage of staff working hours dedicated to M&E. It also provides minor corrections to section 4.

The remaining content is the same.

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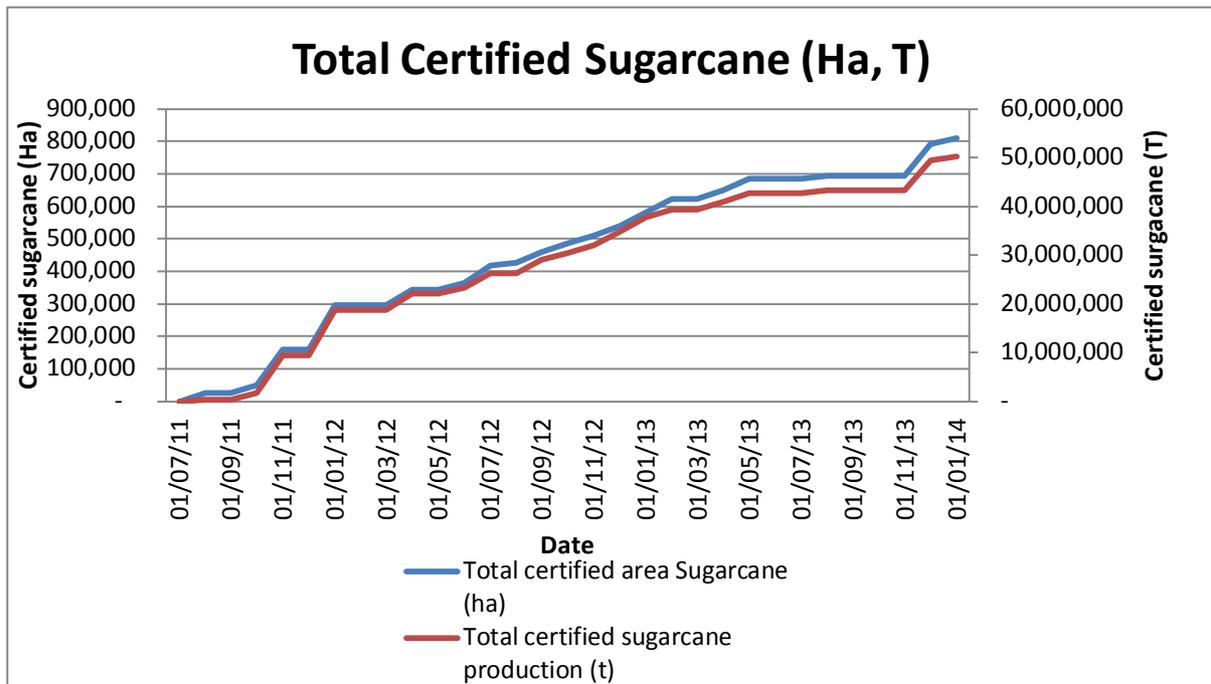
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1. INTRODUCTION TO SCOPE OF M&E PROGRAMME

The objective of this report is to present an overview of [Bonsucro's Monitoring & Evaluation \(M&E\) System](#), its components and seeks to demonstrate its evolution towards compliance with [ISEAL's Impacts Code](#).

Bonsucro has developed and is maintaining a voluntary global metric standard with the objective of improving social, environmental, and economic sustainability of sugarcane farming and of production of sugarcane derived products, including sugar and ethanol. The scope of Bonsucro M&E System reflects this objective, as it is designed to monitor compliance and measure improvements of [Bonsucro's certified members](#) in relation to the [Bonsucro Production Standard](#), and to help refine and continuously improve the changes that Bonsucro intends to achieve. It is also designed to monitor Bonsucro's organisational effectiveness, general awareness about Bonsucro and its Standards, and engagement with the sector.

The geographical scope of the M&E system reflects the locations of certified mills and where Bonsucro has organised engagement activities as well as where its members are located. To date, there are 34 Bonsucro certified sugarcane mills (32 in Brazil, and 2 in Australia), and 181 members in 27 countries. The scope is likely to expand over the next years as membership and certification expand into other countries. Bonsucro has been experiencing increasing demand for certification (see graph below), and forecasts a rapid growth in the number of certified units across the globe in the coming years.

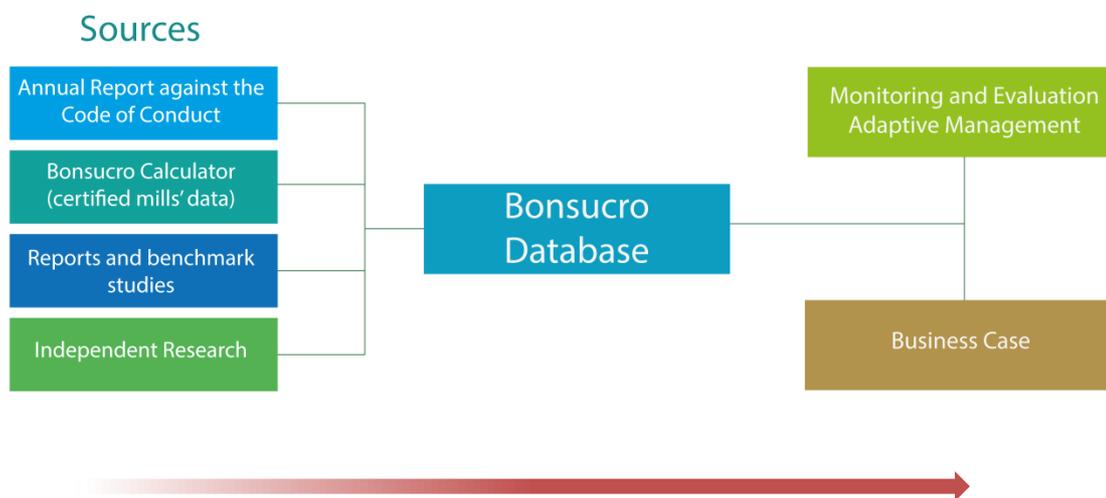


The M&E system covers the following sustainability issues as defined in the Theory of Change (see section 3): Enterprise Resilience (including Efficiencies and Income), Labour Rights, Biodiversity & Natural Resources (including Water & Soil), Climate Change, and Land Rights. For each of these issues, Bonsucro has set short and medium term objectives which Bonsucro monitors by focusing on 14 priority indicators. These indicators are directly taken from the Bonsucro Production Standard. In addition, Bonsucro monitors a group of internal Key Performance Indicators for evaluating the effectiveness of its activities (see section 4). These activities seek to transform the sugarcane industry to a sustainable base, to promote adoption of Bonsucro’s Standards, to enable a thriving market for certified sugarcane products, and to consolidate Bonsucro as the only and legitimate forum for sustainability of the sugarcane sector. The expected long-term impacts of Bonsucro were under [consultation](#) between 26 November 2013 and 10 January 2014 but their attached indicators are not yet finalised.

Bonsucro collects information from various sources. Qualitative data regarding implementation of the Standard, market outlook, and the views and experiences from the adoption of the Standard and/or membership accession are collected through reports against [Bonsucro’s Code of Conduct](#) which are submitted to

Bonsucro on an annual basis. Bonsucro also monitors publication of independent academic research, standard benchmarking studies and other reports relevant to its M&E system. Finally, Bonsucro collects quantitative data from audits and surveillance audits of certified mills, which cover all the sustainability areas described above.

Data Sources & Uses



Bonsucro's Monitoring & Evaluation Programme serves three main purposes:

- Outcomes & Impacts Communication (see section 5): To support the development of a business case, showcase positive results of certification, and to offer a platform for communicating on the outcomes and impacts of adoption of the Bonsucro Standards;
- Strategies behind the Standards (see section 6): to enable Bonsucro to better understand the effectiveness of its Standards in making behavioural changes and to identify their strengths and weaknesses;
- Organisational Learning & Adaptive Management (see section 6): To enable Bonsucro to better understand the effectiveness of the organisation and strategies, and to identify issues, trends, and areas for improvement.

In order to achieve the objectives above, Bonsucro monitors and evaluates its own activities and the outcomes of certification. It also foresees collaboration with



external parties to understand its long-term impacts. The table below offers a summary of the different levels of evaluation related to Bonsucro’s M&E Programme.

Levels of Evaluation in the M&E Programme

Level of Evaluation	Focus	Indicators	Who collects data?	Who carries the evaluation?	Frequency	Publications
Monitoring	Short-term results of Bonsucro’s activities	Internal Key Performance Indicators (KPIs), see page 25.	Bonsucro (through management systems of activities)	Bonsucro	Weekly	Not public
Outcomes	Short to medium-term outcomes of Bonsucro certification	Priority Indicators for M&E, see pages 23-24.	Bonsucro (through the Bonsucro Calculator, Members Annual Reports, and Independent Research)	Bonsucro	Yearly	Preliminary Outcome Report (January, 2014)
Impacts	Long-term impacts of Bonsucro	Not defined	Mixed, several sources	Independent third party	Not defined, but less frequent	No publications were finalised

2. INSTITUTIONAL STRUCTURE OF M&E PROGRAMME

The programme is managed by Rafael Seixas, Bonsucro's Research and Policy Analyst, and supervised by Nicolas Viart, Bonsucro's Head of Sustainability, who is responsible for all technical matters relating to the development and implementation of the Standards and is supported by Bonsucro's Certification Coordinator. The table below presents an overview of the roles, responsibilities and experience related to Monitoring and Evaluation, as well as [contact information](#). The M&E Team is expected to be able to understand how the certification system and data collection processes work as well as having sufficient knowledge in data management.

A dedicated budget provision for the M&E programme has been made for the following financial year (running 1st April 2014 to 31st March 2015) to ensure the organisation commits to maintaining and continuously improving the M&E System. Four staff members are working on the M&E system. A budget of GBP 50,000 is allocated to further develop the Bonsucro Calculator, the data collection tool, and a budget of GBP 12,000 is allocated to support Bonsucro's M&E system and data management, both excluding salary costs. This will allow an easier management of the activities of data analysis and outcome evaluation. Bonsucro may consider hiring external consultants to carry out on the ground impact study. It is expected that the M&E team will remain the same for the coming year with no further addition.

Bonsucro has also been working on the identification of potential partner organisations and strategies for enhancing its M&E Programme development. This took place predominately through ISEAL and all the activities organised by the organisation relevant to M&E activities, such as [webinars & workshops](#), ISEAL Effectiveness Days, [ISEAL Conferences](#) and other projects like the [State of Sustainability Initiatives](#), the [Sustainability Standards Comparison Tool](#), or the GIZ "Expert Consultation: Environmental and Biodiversity Protection in Sustainability Standards". Bonsucro also prepares its staff through internal trainings and training opportunities with other institutions (like the ISEAL webinar trainings for the Impacts Code for example). If knowledge gaps are identified Bonsucro provides

tailored training for its staff, hires external consultants to support the work, or partners with other organisations.

Position (%FT dedicated to M&E) ¹	Current person	Contact info	Role	Background
Head of Sustainability (5%)	Nicolas Viart	Nicolas@bonsucro.com Tel: +44 (0) 20 83410060	Responsible for supervision of M&E Programme and for the data collection tool (Bonsucro Calculator)	MSc in Quality Management, 5 years' experience in sustainability standards, technical expertise in sugarcane
Head of Engagement (5%)	Natasha Schwarzbach	Natasha@bonsucro.com Tel: +44 (0) 20 83410060	Responsible for Bonsucro Engagement Programme, Communications, and for Member Consultation (including Members' Annual Reports)	6 years' experience in sustainability 14 years' experience in consultations, communications and engagement.
Research & Policy Analyst (25%)	Rafael Seixas	Rafael@bonsucro.com Tel: +44 (0) 20 83410060	Responsible for managing the M&E programme. Responsible for research, analysis, and reporting of M&E data.	3 years' experience in outcome evaluation, MSc in International Public Policy
Certification Coordinator (20%)	Dayse Groves	Dayse@bonsucro.com Tel: +44 (0) 20 83410060	Responsible for data quality management and liaising with certification bodies	4 years' experience in Bonsucro data collection processes.

¹ Percentage of full-time working hours dedicated to M&E-related activities

3. DEFINING THE INTENDED CHANGE

Sugarcane has been grown commercially for at least four hundred years.

It is a commodity historically associated with bad practices, whether social (slavery, forced labour, child labour), agricultural (overuse of pesticides, indiscriminate clearing of land in areas of high biodiversity and woodlands), industrial (poisonous wastes, smoke, noise), and economical (low replanting rate, aging and poorly maintained mills). Notwithstanding all these disadvantages, it is also an industry that has been growing steadily worldwide by over 2% yearly² for the last ten years, despite its adverse social and environmental results.

Inspired by the sugarcane sector and the need to create multi-stakeholder roundtables (such as FSC and RSPO), the founding members of Bonsucro (then called Better Sugarcane Initiative - BSI) first met eight years ago to set the objectives (or long term goal) of what is now known as Bonsucro. The objectives have been formalised in the five principles that frame the [Bonsucro Production Standard](#).

They are to ensure the sugarcane sector complies with legislation, respects human rights and labour standards, actively manages biodiversity and ecosystem services, manages production and processing efficiencies and continuously improves key areas of the business. Bonsucro uses a global metric standard, with the aim of continuously improving sugarcane production and downstream processing in order to contribute to a more sustainable future.

In 2008 and to develop the Standard, Bonsucro established three Technical Working Groups (TWGs). These expert groups covered the areas of (1) social and labour issues, (2) processing/mill issues and (3) agronomic practices. The experts were selected from the sugarcane producing areas and reflected a balance of interest groups and global representation. They were in charge of drafting the first version of the standard. They followed the [ISEAL Code of Good Practices](#) to ensure that the

² FAOstat: <http://faostat3.fao.org/faostat-gateway/go/to/home/E>



standards developed were robust and had the widest possible acceptance. By means of public consultations, they engaged extensively with the stakeholders in the widest possible spheres of operation and encouraged participation through comments, suggestions and input of all kind. The stakeholders included farmers, producers, traders, end-users, supporting industries, trade unions, social and environmental NGOs, indigenous groups, government, researchers, academics and certification bodies.

The TWGs embarked on a series of Stakeholder Outreach Meetings, engaging in face-to-face, field and factory meetings with producers and small-scale growers in Australia, Brazil, Dominican Republic, East Africa, South Africa, India, the European Union and Switzerland. Over the same period, pilot studies were conducted using the Standard in Australia, Brazil, Dominican Republic, South Africa and India.

The result of the consultation process was the approval and operation of the first global metric standard for sugarcane sustainability, covering the most important sustainability issues for the sugar and ethanol industry. The Stakeholder Outreach Meetings' records can be found on Bonsucro's website at: <http://bonsucro.com/site/previous-standard-development/>

Attached to the Production Standard, Bonsucro has developed a [Chain of Custody Standard](#). Based on the mass balance principle, it ensures the traceability of the claims of sustainability related to the purchase of certified material made by Bonsucro members.

Since the first version of the Standard was published, the organisation has grown significantly. Bonsucro strives to constantly improve its Standards, to make sure they continue to match the reality and changes within the sugarcane sector, that they are state of the art in terms of sustainability, and that they support Bonsucro's long term goals. A revision is currently being undertaken by the Standard Revision Committee and a revised version of the Standard is expected to be published in June 2014 ([please find more information here](#)). The Standard is not a goal in itself but is the most important tool to achieve certification, yet Bonsucro's objective's go beyond the Standard.

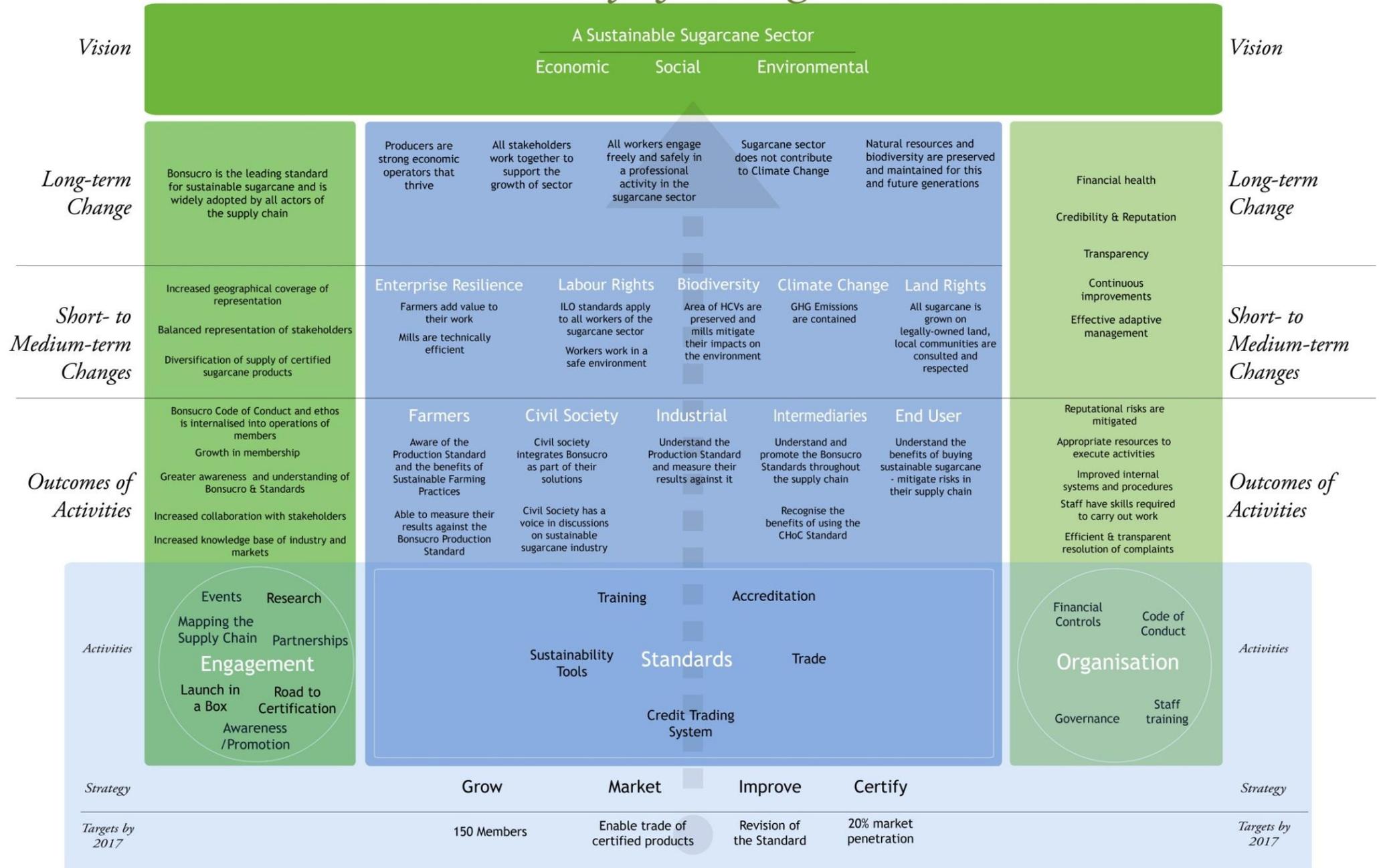
BONSUCRO'S THEORY OF CHANGE

Bonsucro's Theory of Change was developed at the inception of the organisation, but like its Standards, it has since evolved. In November 2013, during [Bonsucro Week](#) (Annual General Meeting held in New Orleans, USA), the Theory of Change and its graphic version (below) were presented to Bonsucro members, which offered comments and insights. Following this meeting, a [public consultation](#) was also carried online between 26 November 2013 and 10 January 2014 to receive additional comments from any interested stakeholder.

The Bonsucro [Board of Directors](#) is expected to formally adopt the Theory of Change in the first quarter of 2014. The following figure and description explain Bonsucro's short, medium, and long term goals and the activities and strategies adopted by Bonsucro to reach them.

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Theory of Change





Bonsucro's vision is *a sugarcane sector that is continuously improving and verified as sustainable*. To achieve its vision, Bonsucro carries a set of activities (based on its Strategic Plan). The outcomes of activities are monitored by internal Key Performance Indicators. Bonsucro's activities contribute to adoption of the Bonsucro Standards, which are the main tool to achieving its short to medium term objectives. The short to medium term changes are the main drivers for evolving towards Bonsucro's long term objectives and contributing to transforming the sugarcane sector.

Bonsucro recognises that economic, environmental, and social sustainability are moving targets, and its Theory of Change reflects the current set of activities undertaken by Bonsucro to promote its vision. The Theory of Change diagram illustrates Bonsucro's mission to foster the **sustainability of the sugarcane sector through a metric-based certification scheme and by supporting continuous improvement** for members.

Bonsucro's Theory of Change is composed of three mutually reinforcing areas of operation (Engagement, Standards, and Organisation), which are fundamental to trigger the transformation to a sustainable sugarcane industry, to promote adoption of Bonsucro's Standards, to enable a thriving market for certified sugarcane products, and to consolidate Bonsucro as the principal and legitimate forum for sustainability of the sugarcane sector. Bonsucro Theory of Change aims at bringing changes to different stakeholders: the producers (millers and farmers), the sugarcane sector including buyers of sugar, ethanol other derived products, intermediaries, traders, etc.

For each of the areas of operation, the Board of Directors has defined a set of targets to be reached by 2017. They have been gathered in a document named the [Strategic Plan](#) which is divided in four chapters: Grow, Market, Improve, and Certify, and help the Secretariat to design its activities to meet these targets.

THEORY OF CHANGE PER AREA OF OPERATION

1. Engagement

Activities: Research, Mapping the Supply Chain, [Events](#), Partnerships, Awareness & Promotion, “Road to Certification”, “Engagement Process”.

Description: This area of operation refers to activities undertaken to grow Bonsucro’s membership and representation, to develop commitment to the Bonsucro Code of Conduct, to increase awareness about the Bonsucro Standards, and to strengthen Bonsucro’s value to the sugarcane sector. Based on desktop assessment of where Bonsucro should be active around the globe (using members interest, sustainability hotspots, market information), the Bonsucro Secretariat ranks the countries/region of activities. Following desktop research and mapping of the relevant stakeholders in a given country or region, Bonsucro designs an Engagement Plan. These plans involve activities to foster partnerships and understanding of challenges in a given country (sustainability local hotspot, structure of the industry, key players and their decision-makers, government activities), leading to one-to-one meetings, workshops, or conferences to locally promote Bonsucro and aiming at its adoption, including membership. The follow-up of these activities lead to more in-depth interactions between Bonsucro members and all actors of the supply chain. These activities are reflected in stepwise approaches to 1- sugarcane mills certification (Road to Certification) and; 2- buyers of sugarcane derived products (Engagement Process) towards marketing of certified sugarcane products.

Rationale: By growing its membership, increasing knowledge about Bonsucro and its Standards, increasing collaboration within the sugarcane sector, and promoting Bonsucro’s Code of Conduct and ethos, Bonsucro expects to trigger a long term commitment of the sector to sustainability. Bonsucro aims at increasing its geographical coverage, promoting a balanced representation in the organisation, and encouraging diversification of the supply of certified sugarcane products. By serving as a forum for the sector, by growing its membership and representation, and by stimulating a market for sustainable products, Bonsucro expects to achieve one of its long-term changes: “Bonsucro is the leading standard for sustainable sugarcane and is widely adopted by all actors of the supply chain”.

2. Standards

Activities: Accreditation, Sustainability Tools, [Training](#), [Credit Trading System](#), and [Trade](#).

Description: Bonsucro maintains and continuously improves its [Production Standard](#) (for sugarcane mills) and [Chain of Custody Standard](#) (for actors of the supply chain). Bonsucro acts as an Accreditation Body, and licenses [Certification Bodies](#) to carry independent third-party audits against its Standards. Bonsucro is full member of ISEAL and implements each of its internationally recognised Code of Good Practices (Standard-Setting, Assurance, and Impacts). Bonsucro offers producer (level 2) and auditor training (level 3) on its Standards and certification system. Bonsucro also authorises external training providers recognised for their skills to conduct level 2 training. Alongside engagement activities, the trainings enable operators to understand and use Bonsucro's Sustainability Tools so as to allow farmers, millers, and other stakeholders to evaluate their practices against the Bonsucro Standards and make the necessary improvement to reach the level set by the Standards. Bonsucro also manages systems to provide trust in the trade and public claim of certified products using the Chain of Custody certification (physical trade) and the Credit Trading System.

Rationale: Bonsucro expects that by increasing awareness and providing capacity building, all actors of the sugarcane sector will be able to better understand the economic, environmental, and social benefits of the implementation of the Bonsucro system, and have the capacity to adopt practices which outcome meet the level set in the Production Standard and therefore to achieve certification, and ultimately to participate in the global market for certified sugarcane products. In the short- to medium- term, we expect to see farmers and millers increasingly implementing Bonsucro systems due to the added value (in terms of efficiencies enhancement and cost reductions) of adopting sustainable practices, leading to improvements in terms of production, labour practices, social rights, biodiversity, natural resources preservation/recuperation, climate change mitigation, and respect for land rights and local rural communities. We also expect end-users of sugarcane derived products to increasingly support Bonsucro to mitigate risks in their supply chain and protect their reputation. The current causal logic considers



that by applying the Standards and enabling a market for certified sugarcane products, Bonsucro and its members generate market incentives (triggering offer and demand) that will contribute to achieving Bonsucro’s vision and long-term sustainability goals:

- “producers are strong economic operators that thrive”
- “all stakeholders work together to support the growth of sector”
- “all workers engage freely and safely in a professional activity in the sugarcane sector”
- “sugarcane sector does not contribute to climate change”
- “natural resources and biodiversity are preserved and maintained for this and future generations”

Finally to provide the trust in the overall system, the accreditation process ensure consistent evaluation of the Standard and compliance with the rules of certification which are key to guarantee the long-term goals of the organisation and safeguard the reputation of the Bonsucro brand.

3. Organisation

Activities: Financial Controls, [Code of Conduct, Governance](#), and Staff Training.

Description: The set of activities under this area of operation reflects the internal objectives of Bonsucro. As with any organisation, Bonsucro needs to be fit-for-purpose to achieve its goals. This includes having the people with the right skills, and the material and financial resources to perform its activities.

Rationale: Bonsucro expects that, by following and promoting its Governance structure, by offering a transparent and effective [Complaint Resolution Process, public consultation on member applicants](#), by introducing and continuously improving its financial practices and system, and by training staff appropriately, reputational risks will be mitigated, the organisation will have the resources and people it needs, and will have improved internal procedures to deliver its mission efficiently. These factors will contribute to achieving Bonsucro’s long-term and



continuous organisational goals of financial health (to achieve and maintain self-sufficiency), credibility & reputation, transparency, continuous improvement, and effective adaptive management.

STRATEGIC PLAN

To achieve its long term vision, the Bonsucro secretariat has implemented several activities. They are summarised in Bonsucro's [Strategic Plan](#) which is the responsibility of Bonsucro's CEO, Nick Goodall, and approved by the Board of Directors. It is articulated around four pillars:

- Grow (increase the membership);
- Market (increase the availability and trade of certified products in different markets);
- Improve (manage Bonsucro systems and standards to support the uptake of sustainability practices across the supply chain);
- Certify (guarantee the credibility of the standards).

Each pillar is subdivided in action plans and measurable objectives that are under the responsibility of the secretariat staff. The plan is revised yearly. These supportive strategies include, amongst others:

- Grow: development a [Global Farmer Network](#) for the exchange of best farming practices; creation of forums for information sharing between industry stakeholders (events); expansion of external collaboration with the civil society and other roundtables (which are now meeting regularly and sharing their experiences); expand Bonsucro's presence in producing regions;
- Market: implementation of a Credit Trading System (already operational) to offer producers an alternative way of selling and further recognition for their investment toward sustainability as well as to support end-users to purchase claiming rights;
- Improve: active promotion of the claim and labelling policies; capacity building along the supply chain; revise the Standards;



- Certify: expansion and training of recognised certification bodies across the globe.

Besides these pillars, the Strategic Plan also considers organisational objectives, which include having a strong back office, achieving Bonsucro's financial self-sufficiency, maintaining and enhancing Bonsucro's credibility and reputation, increasing transparency, and continuously improve the organisation.

INFLUENCING FACTORS AND UNINTENDED CONSEQUENCES

Bonsucro has been working on the identification of influencing factors and unintended consequences of the implementation and uptake of the Standard. Although yet inconclusive, this exercise indicated that potential influencing factors are:

- Uptake of other schemes. *Indicator: how many sugarcane mills are certified against international standards other than Bonsucro;*
- Change in the EU biofuel policy (monitored by Bonsucro);
- Changes in local legislation;
- Adverse financial context;
- Lack of public commitment from end users (buyers). *Indicator: number of pledges received by Bonsucro end user members;*
- Corporate policies,
- Financial resources. *Indicator: revenue-expenditure, financial review against cost centres.*
- Lack of price premiums for growers,
- Lack of incentives for growers (e.g. impossibility to demonstrate long-term effectiveness of the programme, return of investments to achieve certification).



Unintended consequences may include:

- A possible increase in unemployment (due to harvest mechanization resulting of the objective of reducing the atmospheric burden of burning cane pre-harvest coupled with insufficient training of workers);
- Overburdening costs due to required technological improvements to comply with the standard to reach the minimum level of efficiencies. *Indicators: rate of uptake of certification, evidence from member mills*);
- Contributing to social, political, or land tenancy conflicts (such as between certified and non-certified mills, between mills and farmers, etc.). *Indicator: Number of valid complaints received by Bonsucro under the Complaints Resolution Process with regards to Land Rights*;
- Favouring the large-scale production of sugarcane in detriment of smallholders due to required resources to implement the standard and access to required skills, and inducing a switch in the power of negotiation from producers to end-users as the availability of certified sugar increases versus its uses. *Indicator: average size (in Hectares) of supply areas within certification scope*;
- The Standard system implemented by Bonsucro should also be mindful not to excessively focus on wording and documentation and rather make an effort to acquire complete understanding of what happens on the ground;
- By promising a gain in efficiencies of certified entities, Bonsucro might expose itself to disappointment of members if the promise can't be demonstrated or does not become real. *Indicator: rate of uptake of certification, reactions to outcome reports* ;
- Finally there is a risk that developing and enforcing a strict Standard would exclude groups that do not have the ability to match its requirements.

4. ONGOING MONITORING PROGRAMME

In all levels, Bonsucro operates by measuring performance. From its metric Standard to sugarcane mills, to the daily work of the staff, everything is measured and serves as evidence against pre-defined quantifiable and verifiable objectives. We believe that “what gets measured gets managed”.

Aiming at understanding its outcomes and impacts, Bonsucro has developed a set of [Priority Indicators for Monitoring and Evaluation](#). These indicators reflect Bonsucro’s Theory of Change (see section 3) and are considered the most important for observing the intended changes that Bonsucro seeks to promote within the sugarcane sector.

The indicators were selected by the Bonsucro secretariat and were presented for consultation with the membership in November 2013 during [Bonsucro Week](#). They were also open to comments from any interested stakeholder during a [public consultation](#) that ran between 26 November 2013 and 10 January 2014.

The following table summarises Bonsucro’s short to medium-term goals and their respective indicator and metric for monitoring and evaluation in accordance with the Bonsucro Production Standard and the Theory of Change.

Priority Indicators for Monitoring & Evaluation

Area	Short to medium-term goals as per Theory of Change	Issue	Indicator of Bonsucro Production Standard	Indicator	Short to medium-term metric (as per Bonsucro Production Standard)	Compliance outcome
Land Rights	All sugarcane is grown in legally-owned land, local communities are consulted and respected	Land Ownership	1.2.1	The right to use the land can be demonstrated	Yes	Land where sugarcane is grown is legally-owned and not contested by local communities
Enterprise Resilience	Farmers add value to their work	Yields	3.1.2	Yield (tc/ha harvested/y)	45 for Dryland; 65 for Supplementary Irrigated Systems; and 85 for Irrigated Systems	Yields are improved
		Value Added	5.9.1	USD \$/t cane	Mill > 4; Agric >2	Sustainable sugarcane adds value to farmers and mills
	Mills are technically efficient	Mill Efficiency	3.1.4	Mill overall time efficiency (processing time as percent of total time)	>75	Mills are efficient economic operators
Labour Rights	Workers work in a safe environment	Workers Safety	2.3.1	Lost time accident frequency (number per million hours worked)	Mill <15; Agric < 45	Workers engage safely in a professional activity in the sugarcane sector
	ILO Standards apply to all workers of the sugarcane sector	Wages*	2.4.1	Ratio of lowest entry level wage including benefits to minimum wage and benefits required by law (\$/\$)	≥1	National minimum wage is ensured
		Minimum Age of Workers*	2.1.1	Years (Minimum)	18 for hazardous work 15 for non hazardous work	Child labour is eradicated in the sugarcane sector

		Workers Rights* (regarding forced or compulsory labour, discrimination, and freedom of association)	2.1	To comply with ILO's Labour Conventions	Yes	ILO standards apply to all workers of the sugarcane sector
Climate Change	GHG emissions are contained	GHG Emissions	3.2.1	Net GHG emissions for sugar	<0.4 t CO ₂ eq/t sugar	Sugarcane industry does not contribute to climate change.
		GHG Emissions	3.2.2	Net GHG emissions for ethanol	<24 gCO ₂ eq/MJ	Sugarcane industry does not contribute to climate change.
Biodiversity & Natural Resources	Areas of High Conservation Value are preserved and mills mitigate their impacts on the environment	Water	5.2.1	Net water consumed per unit mass of product (kg/kg of product)	Mill , <20 kg/kg sugar; or <30 kg/kg of ethanol. Agric <130 kg/kg cane	Efficient use of water in agriculture and milling. Environmental burden of sugar milling is contained
		Environmental Impacts*	4.1.7	Herbicides and pesticides applied per hectare per year	<5 kg active ingredient/ha/y	Impact on biodiversity of sugarcane growing is managed
		Environmental Impacts*	4.1.6	Nitrogen and phosphorus fertiliser (calculated as phosphate equivalent) applied per hectare per year	<120 kg/ha/y	Impact on biodiversity of sugarcane growing is managed; Run-offs from fertiliser are reduced
		Biodiversity*	4.1.2	High Conservation Value areas (interpreted nationally as described in Appendix 1) used as a % of total land affected by a new project or an expansion	0	Areas with high conservation values are protected

* Core Criteria (compliance is required for certification)



By monitoring these indicators, Bonsucro aims to better understand and monitor its outcomes and impacts, so as to continuously refine its Theory of Change and adapt its strategies. It also seeks to develop a business case, and to communicate about the benefits of sustainability to all actors of the sugarcane sector.

In organisational terms, Bonsucro has a set of internal goals regarding its activities and supporting strategies, which are guided by the Bonsucro's Theory of Change and Strategic Plan, as explained in section 3.

To monitor this, Bonsucro collects data on Key Performance Indicators, to verify the implementation of its activities, which include, amongst others:

- Number of members per category and country;
- Number of certified mills per country;
- Volume and origin/destination of trades of certified products and credits;
- A formal human resources process for evaluating staff performance and identifying training needs;
- Percentage of success at Bonsucro Training Exam;
- Global area under certified sugarcane;
- Age of debt;
- A formal and structured monthly review of Bonsucro's financial performance against cost centres.

Finally, the monitoring of influencing factors and unintended consequences is continuous and carried not only by Bonsucro staff but also by the sugarcane sector itself. A dedicated programme has not yet been implemented to measure the influencing factors or the unintended consequences as such. Nevertheless, Bonsucro events provide forums for the discussion of these factors, making sure that Bonsucro has contact with experts, and up-to-date information regarding the impacts of its activities from the viewpoints of all the industry's stakeholders (millers, farmers, intermediaries, NGOs, buyers, members and non-members etc.). In effect, this business-watch will allow the organisation to adapt to changes.

DATA COLLECTION FOR MONITORING AND EVALUATION

As explained in section 1, Bonsucro has generally four sources of information: 1-) Members' Annual Report against the Code of Conduct; 2-) Certified mills' data; 3-) Reports & benchmark studies; and 4-) Independent research. The data collected is saved in a secure server, backed-up weekly and with controlled access.

Data collection, storage, and use are under responsibility of different staff members:

- *Head of Engagement*: Responsible for gathering and storing data from Members' Annual Reports (submitted yearly);
- *Certification Coordinator*: Responsible for liaising with certification bodies, acquiring, organising, and storing data collected from certified mills;
- *Research and Policy Analyst*: Responsible for monitoring, gathering, and assessing independent research about Bonsucro; Responsible for analysing certification data and writing M&E and outcome reports;
- *Head of Sustainability*: Responsible for M&E system; Responsible for supervision of data collection and organisation; Responsible for the data collection tool (Bonsucro Calculator); Responsible for supervision of data analysis and M&E and outcome reports.

Independent research, reports, and benchmark studies offer important data to Bonsucro; together with Bonsucro events, they may contribute towards monitoring influencing factors and unintended effects as well as towards understanding broader implications of adoption of the Bonsucro standards (e.g. community level impacts). We strive to take in consideration studies from respected organisations, researchers, and authors specialised in the sugarcane sector. Data from these sources is collected directly by the secretariat and by Bonsucro members. They are shared internally to relevant team member for their consideration and further actions.

The Annual Report against the Code of Conduct is a compulsory requirement for Bonsucro's membership. Members respond to questions designed by the Secretariat



regarding their experiences with Bonsucro, their market, their plans, and their activities to support Bonsucro's goals. It is also an opportunity for members to let Bonsucro know about their concerns, challenges, and opportunities in the sugarcane world. The reports offer rich qualitative information about adoption of the standards, market of certified products, amongst others. Data are collated and studied by the secretariat to design global, regional, and local action plans.

Finally, and most importantly, with regards to mills' certification data, to monitor progress regarding the Priority Indicators for M&E presented above, Bonsucro has implemented a data collection protocol (captured in the [Production Standard Audit Guidance](#) and [Certification Protocol](#)), which guides what and how data should be collected for each of the Standard's indicators.

For audit against the Production Standard the growers and millers are required to fill out the **Bonsucro Calculator**, It is used to evaluate conformity of an operator with each metric indicator of the Bonsucro Production Standard by calculating the performance of the operator and comparing it with the level set in the standard. The calculator is filled out for the initial audit and subsequently it must be submitted once a year as part of the yearly surveillance audit. The Bonsucro Calculator is therefore designed to collect, manage data and is used to perform analysis of data, both cross-sectional (comparing certified units' results) and longitudinal (understanding individual evolution over time).

Data verification is put under the responsibility of the [licensed certification bodies](#) which have the missions to collect sufficient evidence that justify any data entered in the tool. The guiding documents clarify how indicators should be interpreted and what is expected from auditors collecting data.

Every auditor collecting data is trained on the Bonsucro Calculator as well as on the data itself, either by Bonsucro or internally, and has the necessary technical knowledge to understand and verify information collected from farms and mills and to report it. Bonsucro's Audit Guidance and Certification Protocol entail different methods to obtain data, including: interviews, sampling, documental and background checking, visual audits, among others. As licensed certification bodies are the entities with full on-the-ground access to the data and the knowledge

necessary to perform audits, ensuring they are skilled, trained and competent increases the reliability of the data, hence the certification decision.

Audit results and Bonsucro calculators are sent to Bonsucro after validation by the certification body. This way, Bonsucro obtains individual-level data of certified member mills. It is important to note that the mills own their individual data and make them available to the certification body which relay them to Bonsucro. Individual-level data will never be disclosed publically. Bonsucro then uses the data in an aggregated way and considers it anonymously for purposes of evaluation and communications.

Through its role of accreditation body, Bonsucro monitors the activity and the compliance of certification bodies with the Certification Protocol and verifies specifically the quality of the work as data verifier of the certification bodies. This helps Bonsucro to have an increased confidence in the data received.

5. OUTCOME AND IMPACT EVALUATION

The implementation of an M&E system is a new management tool used to continuously improve Bonsucro's operations. As explained in section one, the system serves three main purposes:

- Strategies of its standards (see section 6): to enable Bonsucro to better understand the effectiveness of its Standards in making behavioural changes and to identify their strengths and weaknesses
- Outcomes & Impacts Communication (see section 5): To support the development of a business case, showcase positive results of certification, and to offer a platform for communicating on the outcomes and impacts of adoption of the Bonsucro Standards;
- Organisational Learning & Adaptive Management (see section 6): To enable Bonsucro to better understand the effectiveness of the organisation and strategies, and to identify issues, trends, and areas for improvement.

The M&E system will lead to annual outcome evaluations, which will:

- Enable Bonsucro to understand certified units' path towards compliance with the Standard;
- Enable Bonsucro to draw the picture of sustainability in the sugarcane sector;
- Support the continuous revision and improvement of the Standard and of Bonsucro's data collection procedures;
- Enable Bonsucro to monitor the work of certification bodies and to systematise the flow of communications and reporting from them;
- Enable Bonsucro to manage its training programme and support to members, focusing on areas where compliance is difficult or where technical expertise is needed;
- Strengthen the Bonsucro brand and reputation by improving public recognition through a transparent and accurate report of the outcomes and improvements of Bonsucro's adoption by mills and farms;
- Adapt its strategies to the evolution of the sector and efficiently use its resources to plan activities.

Certified units are audited on an annual basis and Bonsucro intends to publish yearly outcome reports. Outcome reports will be published in October/November of every year to coincide with Bonsucro's Annual General Meeting. In this way, Bonsucro seeks to internalise the habit of performing evaluations as well as to increase stakeholder involvement and awareness of the reports.

Evaluations will be carried out by Bonsucro staff with support of external partners and consultants. Evaluations will be open to public comment and available at the [M&E System section of the website](#). All reports will be made with aggregated values, following anonymity rules: individual analysis will not be permitted to protect user's data (see confidentiality policy in Technical Appendix).

Comparisons between certified and non-certified units are still a challenge, since non-certified units either do not collect or disclose information regarding Bonsucro's indicators. Therefore, the initial focus is on certified mills. Data for the first year of certified units has already been collected (thus creating a baseline measure for certified units). To develop a baseline reference, Bonsucro uses the



metric set in the standard or whenever available scientific publications (e.g. GHG emissions of sugarcane mills around the world).

Additionally, Bonsucro is working very closely with its non-certified members to support their data collection journey and encourage them to communicate their results at the earliest stage possible.

Bonsucro has received requests from stakeholders to publish case studies on certification. The case studies provide concrete examples of the path followed by mills to achieve certification and the benefits and improvements they have observed.

A first case study has been published in the “[Bonsucro At a Glance](#)” brochure that was launched at the Bonsucro annual conference held in November 2012 in London.

Bonsucro published (on 15 January 2014) its first [Preliminary Outcome Report](#), based on a subset of the Priority Indicators. It provides a picture of what certified mills have achieved since they became certified and helps to draw a preliminary picture of what Bonsucro certification means for the operators. It also offers baseline data that will be used as reference in the following outcome reports. This first assessment will be refined every year as more data (more certified mills over a longer period of time) are collected and analysed.

To respond to the high level of interest and expectations by stakeholders observed during [Bonsucro Week](#), Bonsucro will endeavour to annually review, update, and expand the data presented in its previous outcome report. Bonsucro’s annual outcome report will be published at the time of each Bonsucro Week (Annual General Meeting).

6. USE OF RESULTS FOR INTERNAL DISCUSSION AND LEARNING

Bonsucro's information is always shared amongst team members in a weekly team meeting. This and the small size of the team (nine staff members) allow Bonsucro to effectively react to news and changes. Also, information is shared with all members via the Bonsucro Bulletin (every two weeks) and in the members' only area of the website.

Outcome and impacts evaluation support discussions and stimulate reflection within Bonsucro, thus assisting the revision of the organisation's practices and goals, thus tailoring its global, regional and local actions.

The Board of Directors meet four times per year and also have the opportunity to learn from the monitoring and reporting of outcomes as part of the monitoring indicators are reported within a dashboard used by the board to follow and steer the evolution of the organisation.

In the same way, interested stakeholders are presented with the M&E information during Bonsucro's Annual General Meetings and may access up-to-date information and outcome reports at the M&E section of the website. We expect it provides a better visibility of how the organisation is performing and encourage them to better engage and interact with it. Member stakeholder days are held annually and every quarter webinars are held with the various classes of membership.

Running the M&E System and working with data will also enable Bonsucro to assess whether there are any gaps in the information collected or disputes regarding reliability and validity of the data and methods used. These would feedback into the process of improving our internal systems, and of refining data collection protocols enforced by Bonsucro. The data also feed into any Standard revision process as they are providing information on how operators perform against the Standard. It also helps answering any question about the relevance of an indicator.



The results will also help Bonsucro to understand where members and potential members might need support (technical, financial) to achieve certification. This feeds into efficiently managing the human and time resources of the organisation.

Bonsucro has developed a claims and labelling requirements document to ensure any claims made on the outcome of certification is substantiated by data, thus preventing unsubstantiated claims regarding the program's impact, undermining its objective and work.

Finally an extended outcome is to support Bonsucro Members in demonstrating their commitment to sustainability and extracting the benefit of implementing and running their sustainability strategies. Offering an M&E system will become part of the added value offered by Bonsucro to the sector.

7. STAKEHOLDER INVOLVEMENT

The calculator (which as is at the heart of the data collection process used by the M&E System) was designed to support the assessment against the Bonsucro Production standard. Like the standard, the calculator was developed using a multi-stakeholder approach. Several multi-stakeholders consultations took place at the time the Standard was developed.

Bonsucro has also consulted about its Theory of Change and Priority Indicators for M&E with members in November 2013, and carried two public consultations (between 26 November 2013 and 10 January 2014) about them.

Additionally and due to the current process of [Revision of the Standard](#), stakeholders are invited to engage with Bonsucro by providing feedback on the current Standard and assessing whether the proposed new Standard will help deliver the mission of Bonsucro. The updated Standard will provide further tools and indicators that could possibly be integrated in the M&E System,

Bonsucro is also committed to transparency and has developed a [Monitoring & Evaluation section](#) on the website, whereby the general public will be able to access and comment on the full outcomes and impact reports, as well as independent research about the work carried out by Bonsucro. Announcement regarding events and other opportunities for stakeholder involvement will also be posted on this section.

8. TECHNICAL APPENDIX

PART A. DATA MANAGEMENT AND CONFIDENTIALITY (ITEMS 9.6 AND 9.7)

As informed in the report, Bonsucro collects data through recognised certification bodies (CBs). CBs are required to be trained by Bonsucro. They sign a License Agreement to become able to carry audits and surveillance audits. Recognised CBs must also agree to follow the guidelines and data collection rules required by the Bonsucro's Certification Protocol and the Bonsucro's Audit Guidance.

The information provided by certification bodies is disclosed to Bonsucro via the Bonsucro Calculator, a tool that enables the collection and management of the required metric indicators. Bonsucro will then analyse the data received and produce an annual report (either aggregating data or employing anonymity).

The protection of confidential and proprietary data takes place in two fronts.

Firstly, Bonsucro and its members have to obey a Code of Conduct, which includes a section on Competition Compliance Policy. Members have to comply with the competition rules of the European Union (EU) and local, federal or national competition or anti-trust laws of other countries in which they operate. As Bonsucro provides a forum for Members to meet and discuss issues concerning the industry in which they operate, Members should be aware of the competition law risks this creates.

Bonsucro is against the sharing of trade sensitive and confidential information between members.

Extract of the Competition Compliance Policy Annex of the Bonsucro Code of Conduct:

2. Bonsucro reserves the right to expel a Member if it reasonably suspects that Member has been involved in any of the following practices at a meeting of any or all of Bonsucro's Members:



2.2.1 Discussing product prices and charges (including discounts and allowances), terms of sale, product or marketing plans and/or business relations with competitors.

2.2.2 Exchanging information with competitors which reduces or removes uncertainties in competition, e.g. price information.

2.2.3 Agreeing with competitors to fix the price at which the Member and competitor will acquire goods and/or services or agreeing to acquire goods and/or services only from specific suppliers.

2.2.4 Agreeing with competitors to provide goods and/or services on the same terms and conditions, leaving customers with little or no choice between suppliers.

Besides the Competition Compliance Policy, Bonsucro also demands the protection of confidential information and proprietary data from recognised CBs.

Extract of the Confidentiality Section of the Certification Bodies' License Agreement:

11. CONFIDENTIALITY

11.1 Each party undertakes that it shall not at any time disclose to any person any confidential information concerning the business, affairs, customers, clients or suppliers of the other party or of any member of the group of companies to which the other party belongs, except as permitted by clause 11.2.

11.2 Each party may disclose the other party's confidential information:

11.2.1 to its employees, officers, representatives or advisers who need to know such information for the purposes of carrying out the party's obligations under this agreement. Each party shall ensure that its employees, officers,



representatives or advisers to whom it discloses the other party's confidential information comply with this clause 11; and

11.2.2 as may be required by law, court order or any governmental or regulatory authority.

11.3 No party shall use any other party's confidential information for any purpose other than to perform its obligations under this agreement.

11.4 All information (whether written, electronic, visual and/or verbal) disclosed by Bonsucro and/or to which CB may have access or develop for Bonsucro by virtue of this agreement (including without limitation, the existence of this agreement and the activities performed by the parties under this agreement) shall be deemed to be confidential information for the purposes of this clause 11.

1.1

The license is valid for three years. Bonsucro carries yearly procedures to determine whether the Certification Body is complying with the agreement, these take the following forms:

- Office Audit: Bonsucro staff conduct an audit of the CB's office to check if the correct procedures for compliance with the license agreement are in place);
- Audit Witnessing: Bonsucro staff join the CB for an audit of a mill and/or farm to verify how the CB works and if the Certification Protocol and Audit Guidance documents are being respected;
- Documental analysis: Bonsucro assesses CB's documentation on audits to search for any non-compliance.



PART B. THE BONSUCRO CALCULATOR (EXCERPT)

Item	Value	Notes
Diesel consumption of transport vehicles	44000 L	
Diesel Energy per liter	37.26 MJ/L	Default value is 37.26 MJ/L. A more representative value for local fuel may be used if available.
Average Case Transport Distance (T-way)	1000 km	
Average Diesel Consumption of transport vehicles	1.70 km/L	
Diesel Energy per liter	37.26 MJ/L	Default value is 37.26 MJ/L. A more representative value for local fuel may be used if available.
Average Pulped	20.24 t cane	
Milling/Processing		
Total Pulped engines	1000000	
Trucking Expenses	100000	
Water from river / wells	1000000	
Other water used	1000000	
Treated effluent water returned to water source	1000000	
Fibre content of cane	14.0 %	
Raw juice purity	85.0 %	
Sucrose content of cane	13.0 %	
Total sugars content of cane expressed as reducing sugars (RT)	14.3 %	
Reducing sugar / sucrose ratio in cane or raw juice	1.0 %	Must be obtained from laboratory analysis
Electric power imported	400000 kWh	
Energy efficiency of electric power supplied	40.0 %	To be obtained from local energy supplier. If not available, use 40 % for new units (after 2008) or 37.5 % for old units (before 2008) (MPCO/CONICO)
Factory Coal Consumption	1000000 kg	
Lower heating value of coal (LHV)	29.0 MJ / kg	Calorific value to be obtained from Coal supplier.
Natural Gas Consumption	1000000 m ³	
Lubricants	1.00 MJ / t cane	If not available, use default value of 9.28 from Wang et al. (2008)
Diesel consumption in mill processing operations	100000 L	
LHV of Diesel	37.26 MJ/L	Default value is 37.26 MJ/L. A more representative value for local fuel may be used if available.
Imported biomass	1000000 t	Include transport and handling energy only
Live used in factories	1000000 t	
Cauchoic acids consumption in mill	1000000 kg	Excludes caustic used in wastewater, required in cell CO2
Starch enzymes and flocculants used in mill	1000000 kg	
Solids feed water treatment chemicals used	1000000 kg	
Factory effluent water in effluents	1000000 m ³	
Cauchoic acids Consumption	1000000 kg	Excludes caustic used in mill for cleaning etc. in cell CO2 above

Input Data spreadsheet - 233 individual data entries are required

Requirement	Parameter	Value	Unit	Compliance	Description
To continuously improve the quality of products from sugar mill	Fermentable total sugar content of cane expressed as invert (TSAI)	100	kg / t cane	COMPLIANT	Used if ethanol is produced, or in conjunction with sugar production. Based on a 90/10 utilization of Total Sugars in Invert (TSAI). Answer as RT in Brackets. Value for reporting period or 5 years rolling average can be used.
	Total sugars content of cane expressed as reducing sugars (RT)	14.3	%		Must be obtained from laboratory analysis
	Sucrose content of cane	13.0	%		
	Reducing sugar / sucrose ratio in cane or raw juice	1.0	%		
To promote energy efficiency	Primary Energy Usage per tonne of sugarcane	< 200	MJ / t cane	COMPLIANT	See appendix 3 for details.
	Diapic content of Nitrogen fertilizer	56.6	MJ / kg N		Shannon et al (2004), Weerts (2006) 26.1
	N application rate, as elemental N	75.0	kg / ha		
To continuously improve the quality of products from sugar mill	N fertilizer energy	4377.1	MJ / ha		
	Phosphorus	9.3	MJ / kg		Shannon et al (2004), Weerts et al. (2006) 7.5
	P ₂ O ₅ application	75.0	kg / ha		
	P ₂ O ₅ fertilizer energy	4973.4	MJ / ha		

Example of a calculation spreadsheet - using the input data it calculates the compliance of an operator with the requirements of the standard